UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,190	07/08/2003	Yoshifumi Takamoto	H-1105	6338

7590 06/01/2007	EXAMINER
Mattingly, Stanger & Malur, P.C. Suite 370 1800 Diagonal Road Alexandria, VA 22314	OSMAN, RAMY M

ART UNIT	PAPER NUMBER
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/614,190	TAKAMOTO ET AL.
	Examiner	Art Unit	
	Ramy M. Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 April 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of Claims

1.   This action is responsive to amendment filed on April 24, 2007, where applicant amended claims 1,3,11-13. Claims 1-15 are pending.

Response to Arguments

2.   Previous 112 second paragraph rejection is withdrawn.

3.   Applicants arguments regarding the art rejection, filed on 4/24/2007, have been considered but are not persuasive.

4.   Applicant argues that Bates does not teach *"where the first device allocates an area of the disk device to the second device, and where the second device allocates a portion of the area allocated from the first device to each of the plurality of clients"*. Applicant states that in the Bates reference, allocation occurs only in storage allocator 104 (stated by Applicant to be the first device), and that the server 102 (stated by Applicant as being the second device) performs no further allocation to clients.

In reply, the Examiner has not applied the Bates reference in the way Applicant has characterized. The following Examiner interpretation applies: Applicants first device is interpreted as being the storage device 106 of Bates; Applicants second device is interpreted as being the storage allocation device 104 of Bates; and Applicants clients are interpreted as being the server devices 102 of Bates. It therefore follows that the storage device 106 allocates all storage locations to allocation device 104, by processing all read/write requests from allocator 104 (see at least column 4 lines 10-20). Allocator 104 then allocates only a portion of data locations on the storage devices 106 to a number of

requesting servers 102 (see at least column 11 lines 58-67). Applicants use of the word "allocation" is broad and is therefore broadly interpreted.

5.   .Applicant argues that Bates does not teach *"where the second device is provided with a means for translating a source network address to a specific network address of the second device, and where the means for translating always translates each of a plurality of network addresses of each of the clients to the specific network address of the second device."*

    In reply, this is an inherent feature of Bates. Bates utilizes a storage area network (SAN) for the purpose of allocating storage areas to requesting servers (column 3 lines 25-34). The SAN is a communication network that is based on the OSI model which includes the transport, network, data link, and physical layers (column 7 lines 57-67 and column 8 lines 13-27). These layers inherently include protocols such as TCP/IP for communication between devices (and include source/destination address and port format). When allocator 104 receives a request from a server (column 9 lines 43-55 and column 10 lines 38-50), that request has the server as the source address and the allocator as the destination address. Furthermore, when the allocator sends a request to the storage device 106 (column 9 lines 43-55 and column 10 lines 38-50), the source address is the allocator and the destination address is the storage device. Therefore address translation is inherent in SANs that utilize TCP/IP. Applicants claim language is broad and is therefore broadly interpreted.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent granted
> on an application for patent by another filed in the United States before the invention by the applicant
> for patent, except that an international application filed under the treaty defined in section 351(a) shall
> have the effects for purposes of this subsection of an application filed in the United States only if the
> international application designated the United States and was published under Article 21(2) of such
> treaty in the English language.

7.   **Claims 1-15 rejected under 35 U.S.C. 102(e) as being anticipated by Bates et**

al (US Patent No 6,977,927).

8.   In reference to claims 1,11 and 12, BATES respectively teaches a network storage

system for supplying a storage to a plurality of clients through a network, said system

comprising:

a first device provided with a disk device (column 4 lines 10-20); and a second

device for managing a connection to said plurality of clients, (column 11 lines 57-67)

wherein said first device allocates an area of said disk device to said second

device (column 4 lines 10-20), wherein said second device allocates a portion of said

area allocated from said first device to each of said plurality of clients (column 3 line 54

– column 4 line 5 and column 11 lines 57-67), and

wherein said second device is provided with means for translating a source

network address to a specific network address of the second device, the specific network

address to be transferred to said first device, such that the means for translating always

translates each of a plurality of network addresses of each of said plurality of clients to

the specific network address of the second device (column 7 lines 57-67 and column 11 lines 21-25 & 57-67).

9.   In reference to claim 2, BATES teaches the network storage system according to claim 1, wherein said second device adds a preset name of said area allocated from said first device to a file name included in said access request received from said client and transfers said file name to said first device (column 11 lines 5-30).

10.   In reference to claim 3, BATES teaches the network storage system according to claim 2, wherein said system, when said second device is started up, encodes an identifier specific to said second device, then transfers said encoded identifier to said first device while said first device decodes said device identifier received from said second device and compares said device identifier received from said second device with device identifiers described in a table stored in said first device so as enable devices described by the device identifiers to be connected to their objects (column 11 lines 5-30).

11.   In reference to claim 4, BATES teaches the network storage system according to claim 3, wherein said first device requests said second device for transferring of its device identifier periodically and inhibits said second device to access said allocated area when receiving no response from said second device or when said device identifier is not found in said table stored in the first device and used to describe devices enabled to access said allocated disk area (column 11 lines 1-30).

12.   In reference to claim 5, BATES teaches the network storage system according to claim 2, wherein said first device, when said second device is started up, transfers the name of said area allocated to said second device (column 10 lines 20-40).

13.   In reference to claim 6, BATES teaches the network storage system according to claim 3, wherein said first device notifies said second device of a usable capacity when said second device is started up and said second device makes a check whether or not said capacity is exceeded when receiving a write request from a client and rejects said write request if said capacity is exceeded (column 11 lines 1-30).

14.   In reference to claim 7, BATES teaches the network storage system according to claim 2, wherein said second device encodes a write or read request from a client, then transfers said encoded request to said first device (column 11 lines 5-30).

15.   In reference to claim 8, BATES teaches the network storage system according to claim 2, wherein said second device, when a client's file is to be transferred to another said second device, determines whether or not said file is transferred between different networks and converts a user identifier described in the management information of said file if YES is a check result (column 12 lines 36-67).

16.   In reference to claim 9, BATES teaches the network storage system according to claim 8, wherein said second device, when having transferred said file, deletes the management information related to said client who has transferred said file therefrom and said another second device adds the management information related to said client thereto (column 11 line 50 – column 12 line 15).

17.   In reference to claims 10,14, BATES teaches the network storage system according to claims 2 and 12, wherein said second device is built in said first device (column 7 lines 3-57).

18.   In reference to claim 13, BATES teaches the network storage system according to claim 12, wherein said network file device has a primary cache for storing copy

information, which is at least partly disk device information; and wherein said client

management device has a secondary cache for storing part of said copy information

stored in said primary cache, which corresponds to said predetermined area allocated to

said client management device (column 10 lines 20-40).

19.   In reference to claim 15, BATES teaches the network storage system according to

claim 12, wherein said network file device and said network storage system are separated

from each other and connected to each other through a network (column 7 lines 3-57).

Conclusion

20.   Applicant is advised that the above specified citations of the relied upon prior art

are only representative of the teachings of the prior art, and that any other supportive

sections within the entirety of the reference (including any figures, incorporation by

references, claims or foreign priority) is implied as being applied to teach the scope of the

claims.

21.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ramy M. Osman whose telephone number is (571) 272-

4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO
May 21, 2007

YVES DALENCOURT
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